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09/293,490	04/15/1999	TOSHIKAZU YOMEYAMA	1113-011	4932

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EXAMINER	
HANNETT, JAMES M	

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2612	19

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/293,490	YOMEYAMA, TOSHIKAZU	
	Examiner	Art Unit	
	James M Hannett	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on Nov. 03, 03

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims 1-2 and 4-14

4)☒ Claim(s) ~~1-14~~ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) ~~1-14~~ is/are rejected. 1-2 and 4-14

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-4 and 7-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1: Claims 1, 2, 5, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,858,020 Homma in view of USPN 5,734,427 Hayashi in view of USPN 6,130,420 Tanaka.

2: As for Claim 1, Homma teaches in the Column 5, Lines 3-11 the use of group scanning circuitry or area scanning circuitry that selects row groups and column groups comprising a plurality of rows and columns. Homma teaches in the Column 5, Lines 12-20 the use of a selector circuit or clock control circuitry that reads image signals according to a selection signal by selecting a desired one row or one column from within the row group or column group, selected by the group scanning circuit. Homma teaches that the vertical shift register selects lines in a line sequential manner, therefore, selects one line at a time within the group of lines selected to be read out. Homma teaches in Figures 1 and 2 the vertical scanning circuit (22) and the horizontal scanning circuit (21) can read a reduced set of image signals from the photoelectric pixels (11) by selecting less than all the rows and pixels when the image signals are read and

wherein the number of image signals read from the photoelectric pixels is uniform across each row and column in which pixels are read (12).

Homma teaches the use of an image sensor that can read image data from an area smaller than the entire area of an image sensor using horizontal (21) and vertical registers (22). Homma teaches the use of reading out a continuous region (12) in the center of the image sensor (11) but does not teach a thinning method where the image sensor can read out row groups and column groups from the image sensor.

Hayashi teaches in the abstract an on Column 2, Lines 40-67 and Column 3, lines 1-15 that it is advantageous to enable a camera to have a thinning feature in which it can thin an image in both a horizontal and vertical direction over the entire region of the image. Hayashi teaches that a thinning process can be performed by using image processing. This method is advantageous because it allows the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the invention of Homma with the thinning process of Hayashi in order to allow the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Hayashi teaches the use of performing a thinning operation over the entire range of the image and does not teach that the thinning process is performed by only reading out the pixels in columns and rows over the entire range of the image sensor.

Tanaka et al teaches in the abstract and on Column 4, Lines 43-67 that it is advantageous to perform a thinning process in which signal charges are read out only from part of the vertical

pixel columns formed by the image sensor. Tanaka et al teaches that this method is advantageous because it reduces power dissipation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the thinning method of Hayashi by only reading out the appropriate lines of data from the image sensor as taught by Tanaka et al in order to reduces power dissipation in the camera.

3: In regards to Claim 2, Homma teaches in Figures 1 and 5, and on Column 4, Lines 3-52 that the horizontal scanning circuit (21) contains a horizontal group scanning circuit that selects column groups (Figure 2) along a first row (13) and a horizontal selector circuit that selects at least one desired column within at least one column group selected by the horizontal group scanning circuit to provide a first pixel set, and wherein the horizontal selector circuit includes memory that stores the first pixel set, and the horizontal group scanning circuit selects column groups along a second row and the horizontal selector circuit selects at least one column within at least one column group selected by the horizontal group scanning circuit to provide a second pixel set that is stored in the memory, and wherein the horizontal scanning circuit reads the stored image signals sequentially by horizontal reading intervals.

4: In regards to Claim 5, Homma teaches the horizontal scanning circuit (21) contains a horizontal group scanning circuit that selects column groups and a horizontal selector circuit that selects at least one column within the column group. It is inherent in the design of Homma that when scanning the reduced image area (12) a power cutoff function would be used to prevent the column select voltage lines connected to the columns outside the region of (12) from enabling the pixels to be read.

5: As for Claim 6, Homma teaches on Column 2, Lines 55-68 and on Figure 5, the group scanning circuit is comprised of shift registers (108 and 109) that can be preset globally so as to select a plurality of row groups or column groups simultaneously, and whereby a signal can be synthesized by reading from a plurality of rows or columns simultaneously, which rows or columns are selected by the selector circuit from within the row groups or column groups, respectfully.

6: As for Claim 8, Homma teaches on Column 4, Lines (43-46, and 64-68) the method of summing image signals from a plurality of photoelectric pixels of a first row, comprising the step of reading a plurality of columns simultaneously. It is viewed that rows and columns can be interchanged and is viewed as equivalent if the summing process interchanges rows with columns.

7: As for Claim 9, Homma teaches on Column 2, Lines 50-54 the photoelectric pixels that are read can be reset.

8: In regards to Claim 10, Homma teaches in the Column 5, Lines 3-11 and depicts in Figure 1 the reading scanning circuit can read a reduced pixel set (12) comprising less that the plurality of photoelectric pixels (11) wherein the number of pixels in each row is substantially the same and the number of pixels read in each column is substantially the same (region is a rectangle).

Homma teaches the use of an image sensor that can read image data from an area smaller than the entire area of an image sensor using horizontal (21) and vertical registers (22). Homma teaches the use of reading out a continuous region (12) in the center of the image sensor (11) but

does not teach a thinning method where the image sensor can read out row groups and column groups from the image sensor.

Hayashi teaches in the abstract an on Column 2, Lines 40-67 and Column 3, lines 1-15 that it is advantageous to enable a camera to have a thinning feature in which it can thin an image in both a horizontal and vertical direction over the entire region of the image. Hayashi teaches that a thinning process can be performed by using image processing. This method is advantageous because it allows the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the invention of Homma with the thinning process of Hayashi in order to allow the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Hayashi teaches the use of performing a thinning operation over the entire range of the image and does not teach that the thinning process is performed by only reading out the pixels in columns and rows over the entire range of the image sensor.

Tanaka et al teaches in the abstract and on Column 4, Lines 43-67 that it is advantageous to perform a thinning process in which signal charges are read out only from part of the vertical pixel columns formed by the image sensor. Tanaka et al teaches that this method is advantageous because it reduces power dissipation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the thinning method of Hayashi by only reading out the

appropriate lines of data from the image sensor as taught by Tanaka et al in order to reduces power dissipation in the camera.

9: Claims 4, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,858,020 Homma in view of USPN 5,734,427 Hayashi in view of USPN 6,130,420 Tanaka in view of USPN 5,914,749 Bawolek et al.

10: As for Claim 4, Homma teaches the vertical scanning circuit and horizontal scanning circuit read a reduced image set from the pixels in the image sensor.

Homma does not specifically teach the use of a color image sensor with photoelectric pixels arranged in a first sequence of color, and the vertical scanning circuit and horizontal scanning circuit read a reduced image set from the pixels in a sequence of color that is substantially identical to the first sequence of color.

Bawolek et al teaches in Figure 3b the use of a color image sensor for an image-sensing device. It is clear that if the color pixel arrangement shown in Figure 3b of Bawolek et al were used for the image sensor of Homma a reduced pixel set read out of the image sensor would have a color pixel configuration that would be substantially identical to the color sequence for the entire image sensor.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the color pixel configuration as taught by Bawolek et al in the image sensor of Homma el al in order to allow for images to be captured in color.

11: In regards to Claim 11, Homma teaches the use of a reading scanning circuit that can read a reduced pixel set (12) comprising less than the plurality of photoelectric pixels in the pixel matrix (11).

Homma teaches the use of an image sensor that can read image data from an area smaller than the entire area of an image sensor using horizontal (21) and vertical registers (22). Homma teaches the use of reading out a continuous region (12) in the center of the image sensor (11) but does not teach a thinning method where the image sensor can read out row groups and column groups from the image sensor.

Hayashi teaches in the abstract an on Column 2, Lines 40-67 and Column 3, lines 1-15 that it is advantageous to enable a camera to have a thinning feature in which it can thin an image in both a horizontal and vertical direction over the entire region of the image. Hayashi teaches that a thinning process can be performed by using image processing. This method is advantageous because it allows the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the invention of Homma with the thinning process of Hayashi in order to allow the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Hayashi teaches the use of performing a thinning operation over the entire range of the image and does not teach that the thinning process is performed by only reading out the pixels in columns and rows over the entire range of the image sensor.

Tanaka et al teaches in the abstract and on Column 4, Lines 43-67 that it is advantageous to perform a thinning process in which signal charges are read out only from part of the vertical pixel columns formed by the image sensor. Tanaka et al teaches that this method is advantageous because it reduces power dissipation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the thinning method of Hayashi by only reading out the appropriate lines of data from the image sensor as taught by Tanaka et al in order to reduces power dissipation in the camera.

Homma does not specifically teach the use of a color image sensor with photoelectric pixels arranged in a first sequence of color, and the vertical scanning circuit and horizontal scanning circuit read a reduced image set from the pixels in a sequence of color that is substantially similar to the first sequence of color.

Bawolek et al teaches in Figure 3b the use of a color image sensor for an image-sensing device. It is clear that if the color pixel arrangement shown in Figure 3b of Bawolek et al were used for the image sensor of Homma a reduced pixel set read out of the image sensor would have a color pixel configuration that would be substantially identical to the color sequence for the entire image sensor.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the color pixel configuration as taught by Bawolek et al in the image sensor of Homma el al in order to allow for images to be captured in color.

12: As for Claim 12, Homma in view of Bawolek et al teaches in Figure 3b the plurality of photoelectric pixels are arranged in a second sequence of colors along a second row and wherein the sequence of pixels read in the reduced pixel set has a first reduced-set sequence that is substantially similar to the first sequence of colors and a second reduced set sequence that is substantially similar to the second sequence of colors.

13: Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,512,945 Sakurai et al in view of USPN 4,858,020 Homma in view of USPN 5,734,427 Hayashi in view of USPN 6,130,420 Tanaka.

14: As for Claim 13, Sakurai et al teaches in Figure 31 the use of a camera lens (1901) that receives image light from a photographic object A display (1902), a solid state camera device (1904) having a plurality of photoelectric conversion pixels arranged in a matrix of rows and columns so that light received by the camera lens is incident on the matrix.

Sakurai et al does not teach the use of a scanning circuit that can read full image information from the photoelectric pixels by sequentially selecting all photoelectric pixels, and can read a reduced set of image information from the photoelectric pixels by selecting less that all the photoelectric pixels. A controller can control the camera device to obtain and record full image information of the entire plurality of photoelectric pixels and can control the solid-state camera device to display the reduced set of image information.

Homma teaches in the abstract and in Figures 1 and 5 and on Column 1, Lines 25-43 the use of an image sensor that includes scanning circuit that can read full image information (11) from the photoelectric pixels by sequentially selecting all photoelectric pixels, and can read a reduced set (12) of image information from the photoelectric pixels by selecting less that all the photoelectric pixels. Homma teaches on Column 4, Lines 53-64 the use of a controller that can control the camera device to obtain and record full image information of the entire plurality of photoelectric pixels, in that all pixels are selected because the start points and end points are located at the upper left end and lower right end of the image sensor. Homma teaches on Column 5, Lines 3-11 a controller that can control the solid-state camera device to read out a reduced set

of image information while zooming by selecting a smaller region than the entire area of the image sensor. Homma teaches on Column 5, Lines 21-43 that during zooming the number of effective scanning lines of the display are 490 and the number of the horizontal lines of the horizontal line part (106) is L, the vertical clock controller (114) controls the clock pulses in such a way as to have the vertical shift register (109) gain access from the upper end of the horizontal line part (106). Therefore, the pixels read out for display will start at the horizontal line corresponding to the line at the top of the reduced region (106). Therefore, the camera displays a reduced set of image information to the display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the image sensor of Homma in the digital camera of Sakurai et al in order to enable a digital camera which is capable of adequately reading out sensed image information from a desired area of an image sensor surface.

Homma teaches the use of an image sensor that can read image data from an area smaller than the entire area of an image sensor using horizontal (21) and vertical registers (22). Homma teaches the use of reading out a continuous region (12) in the center of the image sensor (11) but does not teach a thinning method where the image sensor can read out row groups and column groups from the image sensor.

Hayashi teaches in the abstract an on Column 2, Lines 40-67 and Column 3, lines 1-15 that it is advantageous to enable a camera to have a thinning feature in which it can thin an image in both a horizontal and vertical direction over the entire region of the image. Hayashi teaches that a thinning process can be performed by using image processing. This method is

advantageous because it allows the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the invention of Homma with the thinning process of Hayashi in order to allow the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Hayashi teaches the use of performing a thinning operation over the entire range of the image and does not teach that the thinning process is performed by only reading out the pixels in columns and rows over the entire range of the image sensor.

Tanaka et al teaches in the abstract and on Column 4, Lines 43-67 that it is advantageous to perform a thinning process in which signal charges are read out only from part of the vertical pixel columns formed by the image sensor. Tanaka et al teaches that this method is advantageous because it reduces power dissipation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the thinning method of Hayashi by only reading out the appropriate lines of data from the image sensor as taught by Tanaka et al in order to reduces power dissipation in the camera.

15: In regards to Claim 14, Sakurai et al teaches in Figure 31 the use of a camera lens (1901) that receives image light from a photographic object. A solid-state camera device (1904) having a plurality of photoelectric conversion pixels arranged in a matrix of rows and columns so that light received by the camera lens is incident on the matrix,

Sakurai et al does not teach the use of a scanning circuit that reads image information from the photographic pixels by a first sequence of selecting each photoelectric pixel and by a second sequence of selecting less than all the photoelectric pixels thereby reducing the number of photoelectric pixels that are read. Sakurai et al further does not teach the use of a controller that controls the solid-state camera device such that the scanning circuit selects photoelectric pixels by the first sequence when the image information is recorded and selects photoelectric pixels by the second sequence when providing image information to the exposure control.

Homma teaches in Figure 1 and on Column 4, Lines 53-64 and Column 5, Lines 3-11 the use of a scanning circuit that reads all image information from the photographic pixels by a first sequence of selecting each photoelectric pixel (ordinary operation mode) in that all pixels are selected because the start points and end points are located at the upper left end and lower right end of the image sensor. Homma teaches a second sequence of selecting less than all the photoelectric pixels (zooming mode) thereby reducing the number of photoelectric pixels that are read. Homma further teaches the use of a controller that controls the solid-state camera device such that the scanning circuit selects photoelectric pixels by the first sequence when the image information is recorded (normal operation mode) and selects photoelectric pixels by the second sequence when providing zooming image information to the exposure control.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the image sensor of Homma in the digital camera of Sakurai et al. in order to enable an image sensing device that allows for normal or teleconversion operation and is capable of being non-destructively read out.

Homma teaches the use of an image sensor that can read image data from an area smaller than the entire area of an image sensor using horizontal (21) and vertical registers (22). Homma teaches the use of reading out a continuous region (12) in the center of the image sensor (11) but does not teach a thinning method where the image sensor can read out row groups and column groups from the image sensor.

Hayashi teaches in the abstract an on Column 2, Lines 40-67 and Column 3, lines 1-15 that it is advantageous to enable a camera to have a thinning feature in which it can thin an image in both a horizontal and vertical direction over the entire region of the image. Hayashi teaches that a thinning process can be performed by using image processing. This method is advantageous because it allows the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the invention of Homma with the thinning process of Hayashi in order to allow the image displayed on the entire region of the image sensor to be displayed on a display with a lower resolution.

Hayashi teaches the use of performing a thinning operation over the entire range of the image and does not teach that the thinning process is performed by only reading out the pixels in columns and rows over the entire range of the image sensor.

Tanaka et al teaches in the abstract and on Column 4, Lines 43-67 that it is advantageous to perform a thinning process in which signal charges are read out only from part of the vertical pixel columns formed by the image sensor. Tanaka et al teaches that this method is advantageous because it reduces power dissipation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the thinning method of Hayashi by only reading out the appropriate lines of data from the image sensor as taught by Tanaka et al in order to reduces power dissipation in the camera.

16: Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,858,020 Homma in view of USPN 5,734,427 Hayashi in view of USPN 6,130,420 Tanaka in view of USPN 6,067,115 Suda.

17: As for Claim 7, Homma teaches in the abstract the use of group scanning circuitry or area scanning circuitry that selects row groups and column groups comprising a plurality of rows and columns. Homma teaches in the abstract the use of a selector circuit or clock control circuitry that reads image signals according to a selection signal by selecting a desired one row or one column from within the row group or column group, selected by the group scanning circuit. Homma teaches on Column 2, Lines 55-68 and on Figure 5, the group scanning circuit is comprised of shift registers (108 and 109) that can be preset globally so as to select a plurality of row groups or column groups simultaneously, and whereby a signal can be synthesized by reading from a plurality of rows or columns simultaneously, which rows or columns are selected by the selector circuit from within the row groups or column groups, respectfully. Homma teaches on Column 4, Lines (43-46, and 64-68) the method of summing image signals from a plurality of photoelectric pixels of a first row, comprising the step of reading a plurality of columns simultaneously. It is viewed that rows and columns can be interchanged and is viewed as equivalent if the summing process interchanges rows with columns.

Homma does not teach the method of determining a maximum luminance of a plurality of pixels in a first column of pixels.

Suda teaches on Column 6, Lines 30-45 the method of determining a maximum luminance of a plurality of pixels in a first row of pixels in an auto focus method for a camera, In order to enable a camera to have the ability to have an auto focus. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the image sensor circuitry of Homma to determining a maximum luminance of a plurality of pixels in a first row of pixels as taught by Suda in order to enable the image sensor to be used in a digital camera and provide the auto focus function as taught by Suda.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,480,227 Yoneyame; USPN 6,529,236 Watanabe; USPN 5,734,427 Hayashi teaches a image thinning process that thins out image data in both a horizontal and vertical direction while maintaining the color format of the image sensor.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-842-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is 703-308-6789.

James Hannett
Examiner
Art Unit 2612

JMH
January 23, 2004

NGOC-YEN VU
PRIMARY EXAMINER